

THE DER WEEKLY

www.eren.doe.gov/der

Vol. 2 No. 49

December 14, 2001

Industry News

Excel Energy Taps Hidden Resources

Xcel Energy has signed a seven-year contract with Celerity Energy of Portland, Ore., for up to five megawatts of electricity from backup generators owned by Colorado businesses and industries. Celerity Energy will convert diesel units to mixed-fuel generators that will burn natural gas as their main fuel. Celerity will take over maintenance of the generators and equip them to be remotely operated as one unit. The electricity from these generators will serve the customers' own business needs and reduce the amount of electricity they would have been drawing from Xcel Energy's system. Excess electricity from the generators will be sent to Xcel Energy's system during peak periods if needed.

"Celerity Energy offers a useful service to us by aggregating the electricity generation from several customers and then by becoming our single point of contact when the generation is needed," said Price Hatcher, a purchased power analyst with Xcel Energy. According to Hatcher there may be as much as 500 megawatts of underutilized backup generation in the Colorado service area. The partnership is a mechanism to show distributed generation is reliable and economical for future resource planning.

GE's Power in a Box

A Los Angeles-area resort has purchased two GE Power in a Box units to supply all energy demands to its 600 acres. The one-megawatt Jenbacher natural gas-fired engines will be used in a cogeneration application to provide space heating, hot water, and air conditioning for the complex's 300-room hotel and 50-meter, Olympic-size swimming pool. The reciprocating engines will be installed in parallel with existing electric service from the local City of Industry, CA utility. John Ballas, an engineer on site is excited about the



Picture shows a cutaway of the trailer revealing the engine.

cogeneration application offered by the compact units because they are easily adaptable for their use. The units have been delivered to the site and are anticipated to be installed in the spring of 2002. More information on GE's Power in a Box packaged units, which were introduced earlier this year by GE Distributed Power, can be found at www.ge.com/industry/utilities.htm.

Millennium Cell's Hydrogen on Demand

On December 12, Millennium Cell Inc., a developer of hydrogen fuel systems that safely generate, store, and deliver pure hydrogen for clean energy applications, announced that its Hydrogen on Demand™ fuel system has been integrated into DaimlerChrysler's new Chrysler minivan. An on-board fuel cell will be powered by hydrogen created from reacting sodium borohydride and water. The minivan has a range of 300 miles per tank, comparable to a gasoline-powered vehicle. The Eatontown, N.J.-based company's stock price received a nice bump-up over 60% at one point-but shares have slid slightly on profit taking. More information can be found at www.millenniumcell.com.

Bowman Power Systems' Micro-cogen



UK-based Bowman Power Systems has signed a major new distribution agreement with Nedalo, one of the largest suppliers of energy-related equipment within the Netherlands and Europe. The first phase of the agreement will see Nedalo distributing Bowman Power Systems throughout Europe, followed by USA distribution in phase two. The companies have also announced their first order, a full CHP package for a site in the UK. Bowman is manufacturing 25-80kW microturbines with waste heat recovery units and chiller/refrigeration systems.

In related news, Bowman has won a major investment and distribution agreement with Schneider Electric. The investment and technical collaboration agreement with Schneider Electric will apply to global markets with a particular focus on secure power solutions in addition to the more traditional CHP solutions.

(Continued on page 2)

*A recent survey released stated that energy efficiency has replaced price as the top appliance-purchasing factor in all regions of the U.S.**

DOE News

DOE Attends APEP Workshop

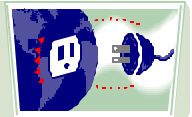
John Kueck of Oak Ridge National Laboratory and Jerry Ginn of Sandia National Laboratory attended a workshop of the Advanced Power and Energy Program (APEP) at the University of California, Irvine on December 11. The APEP is developing standardized test procedures for evaluating microturbine generator performance. The procedures are intended to provide consistent means of evaluating the initial and long-term performance of microturbines from various manufacturers, as well as to identify critical technology barriers. A first edition of the test protocol is due to the California Energy Commission (CEC) in March 2002. This first edition will concentrate on type testing of microturbines in utility interactive operation. The protocol will subsequently be refined to include field testing procedures and to include evaluation criteria for grid-independent operation. Grid-independent test protocols will address load-compatibility issues such as motor starting capability and the effect of nonlinear load currents on voltage distortion. Knowledge of these parameters will be essential in planning power parks and micro grids. In addition to the university and the national labs, utilities, manufacturers, end users, and the CEC were represented at the workshop. For more information about APEP visit www.apecp.uci.edu.

Regional Office News

ARO Attends Energy Task Force Meeting

The Atlanta Regional Office (ARO) represented the DOE at the Georgia Governor's Energy Task Force meeting on December 11. Division Director David Waldrop represented ARO Director Jim Powell at the event held in the State Capitol. Numerous state legislators, and representatives from associations, foundations, energy and environmental interest groups, and electric utilities attended. The Task Force was chaired by State Senator Charles Tanksley (R-32nd). Objectives were established, subcommittees appointed and schedules and timetables determined. Updates and activities on this group can be found at www.gagovernor.org/energy_taskforce.html.

What's on the Web



The website for the Green Power Partnership has just been posted at www.epa.gov/greenpower.

Modeled after Energy Star, the Green Power Partnership is a new EPA voluntary program designed to increase demand for green power. In return for technical assistance and recognition, businesses, governments, and other organizations make a commitment to switch a specific percentage of their electricity to green power. The partnership was developed to take advantage of the pollution prevention opportunity being created by the increasing availability of green power nationwide. EPA first announced the partnership earlier this year with 20 Founding Partners, including Fortune 500 companies, cities, and other leading organizations.

Green Power Partners enjoy the following benefits and services:

Technical Information and Support: EPA will provide partners with access to technical information on buying green power, including case studies and a purchasing toolkit. Partners will also have access to current market information, sample RFPs, and guidance on product comparison.

Network: EPA will provide partners with access to a network of green power providers, green power purchasers, and related local and national environmental organizations.

Public Recognition: Partners will receive national recognition through awards and press announcements. EPA also works with each partner to tailor an individual communications plan. A partner's plan might include press events, advertisements, or internal company communications.

Use of Partnership Logo: Partners will gain access to a Green Power Partnership logo that can be used in corporate outreach and media materials.

During the coming year, the Partnership will be developing products and activities to complement the efforts of regional and national NGO's working on green power. Additional information will be contained in the first edition of the Green Power Partnership Update that will be sent out early next year.



The Database of State Incentives for Renewable Energy (DSIRE) is a project of the Interstate Renewable Energy Council (IREC), funded by the U.S. Department of Energy's Office of Power Technologies and managed by the North Carolina Solar Center. The database is accessible via website, www.ies.ncsu.edu/dsire, where those interested in renewable energy can go to find renewable energy incentive programs listed for each state. Below are a few highlights relevant to distributed energy resources:

California – Governor Gray Davis (D) has extended the California Energy Commission's Solar Energy and Distributed Generation Grant Program through the 2001-2002 fiscal year. Distributed generation systems that are eligible for Program funding (provided that they meet certain efficiency and environmental specifications) include microcogeneration, gas turbines, fuel cells, and reciprocating internal combustion engines. Each system is eligible for \$2,000 or 10% of total system cost, whichever is less.

Maryland – The Clean Energy Incentive Act provides sales tax exemptions and income tax rebates for certain renewable-energy-fueled appliances, vehicles, and power generators. These include photovoltaics, fuel cells, and biomass-fueled devices. Fuel cells must have a generating efficiency greater than 35% to qualify.

New Jersey – New Jersey's 199 restructuring law included rebates of \$3 to \$5/watt for fuel cells, photovoltaics, and wind- or biomass-powered devices, depending upon the size of the system.

New York – The State of New York passed a Green Building Tax Credit that includes refunds 30% of the cost of each fuel cell over five years, to a maximum of \$1000/kW.

Oregon – Fuel cell power generators are eligible for tax credits of the \$.60 per estimated kilowatt saved in the first year, with a maximum of \$1500. The system must have a rated stack capacity of more than 0.5 kilowatts and less than 10 kilowatts.

The DSIRE database was started in 1995 and is updated daily, so check back frequently for new information.

Calendar of Events

JANUARY 2002			
10-11	Fundamentals of Energy Management	Dallas, TX	www.aeecenter.org/seminars
11-13	Managing the Risks of Retail Operation	Orlando, FL	www.infocastinc.com
14-15	Material Technologies for Fuel Cells and Power Electronics	Cocoa Beach, FL	www.ceramics.org/meetings/ECD2002/expo.asp
17-18	The Commercialization of Energy Technologies	New York, NY	www.cbinet.com/wconnect/wc.dll?CBEvent~GetMoreInfo~PB209
17-18	Annual Workshop on Microturbine Applications	College Park, MD	Sandra Maldonado maldonadosl@ornl.gov
28-Feb.1	Distributed Power Program Annual Review Meeting	Arlington, VA	kimberly_taylor@nrel.gov
29-Feb.1	Reducing Your Energy Costs Conference and Exhibit	New Orleans, LA	Stuart Steller, 781-939-2411, s.steller@cbinet.com

84 percent said they anticipate that energy efficiency will be a "very important consideration" in making future purchasing decisions.*

Calendar of Events

FEBRUARY 2002

27-Mar 1	DistribuTECH	Miami Beach, FL	www.pennwellevents.com
2	Distributed Resources, Renewables and the Environment	Portland, OR	newsdata@newsdata.com ; 503-230-5884 (Bonneville Power Administration)
4-7	ICEPAG 2002	Newport Beach, CA	www.parcon.uci.edu/colloquium
6-7	Fuel Cell Dynamics: Reality, Not Hype	New York, NY	www.alliedworld.com
11-13	NASEO 2002 Energy Outlook Conference	Washington, DC	www.naseo.org/events/default.htm
20-22	New and Emerging Technologies Conference	Tucson, AZ	www.nreca.org/edu_events/conferences/newtech/html/conference.html
Feb 25-March 1	Turbine Power Systems Conference and Condition Monitoring Workshop	Galveston, TX	www.netl.doe.gov

MARCH 2002

7-8	Distributed Generation	South San Francisco, CA	www.aeecenter.org/seminars
11-13	6th Annual Distributed Generation & On-Site Power Conference	Atlanta, GA	www.dist-gen.com ; 508-427-9470; gesi@mediaone.net
14-15	Fundamentals of Energy Management	Las Vegas, NV	www.aeecenter.org/seminars
12-14	Microturbine Program Review	Fairfax, VA	Debbie Haught 202-586-2211
17-21	EPRI's 7th Distributed Resources Conference and Expo	Dallas, TX	www.epri.com/programHigh.asp?program=238295&objid=266151
19-21	Electric Power 2002	St. Louis, MO	www.electricpowerexpo.com
20-23	Building Energy Conference	Medford, MA	www.nesea.org ; 877-44SOLAR, ext. 20
25-26	Fundamentals of Cogeneration & On-site Generation	Philadelphia, PA	www.aeecenter.org/seminars
27-28	GLOBALCON Energy/Facilities Management Conference & Expo	Philadelphia, PA	www.aeecenter.org/seminars

APRIL 2002

3-4	The 2002 Hydrogen Investment Forum	Washington, DC	www.intertechusa.com
-----	------------------------------------	----------------	--